ACEWELL ATV Computer

ACE-31xx/37xx/38xx series User's Manual

www.acewell-meter.com English

E 13 10R-022812

Thanks for purchsaing an Acewell ATV/Motorcycle/Scooter computer. This manual is specifically designed for ACE-3XXX series. The ACE-3100/3150 does not have any extra LED indicator. The ACE-37XX/38XX series has 4-8 LED indicators. Different models have different LED indicators; a fuel meter is optional, but all other functions are the same. You may find that the photo has a set of LED indicators different from your computer; the photo is for reference only.

PANEL DESCRIPTIONS

1. Tachometer Scale
2. Bar Tachometer
3. 1st row display: Speedometer and MAX speedometer.
4. 2nd row display: Other functions
5. RESET Button
6. MODE Button
7. Fuel Meter Bar (Optional)
8. LED Indicator symbols

⇦	Left-Direction Indicator/Green		Engine Oil / Red
≡D	Main-Beam Headlamp/Blue	N	Neutral Gear /Green
⇨	Right-Direction Indicator/Green	R	Reverse Gear /Red
⚠	Hazard Warning/ Red	D	Drive Gear /Green
P	Parking/Green		Engine coolant temperature/ Red
⇦⇨	Direction Indicator/Green		Rear Fog Lamp/Amber
⇦1⇨	Trailer Flashers/Green		Engine "Not In Use"/Red

FEATURES

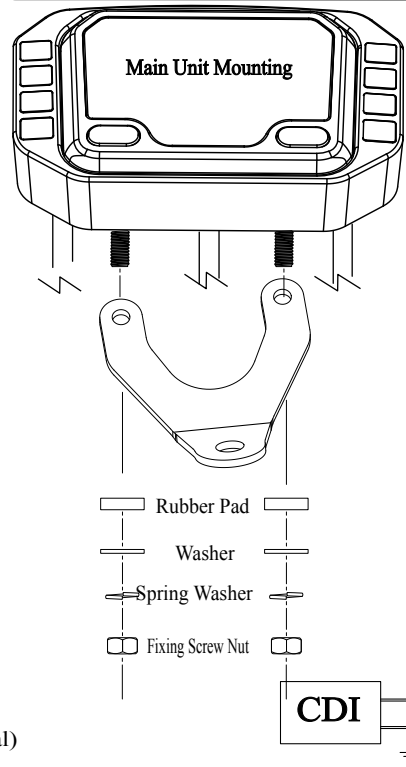
- Includes analog and digital tachometer, speedometer(300km/h maximum), trip meter, odometer, clock, average speedometer, maximum speedometer, riding timer and cumulativel riding timer.
- Computer unit has 4-8 built-in LED for different-purpose indicators.
- LCD has 2 rows of digital and one analog bar-graphic tachometer displays, with blue LED backlight.
- Odometer and cumulative riding timer measurements are stored in memory, even when power is off.
- The computer's clock display is always on, even when other functions are power-off.
- Adjustable wheel circumference suitable for all kind of wheels: setting range of 1-3999 mm setting.
- Waterproof design

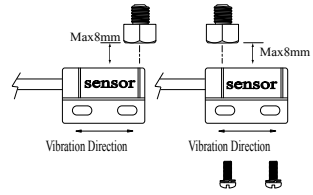
SPECIFICATIONS

FUNCTION	Symbol	SPECIFICATIONS	INCREMENTS	ACCURACY
Bar Tachometer		500-11,000 rpm	500 rpm	
Digital Tachometer	RPM	100-19,900rpm	100 rpm	
Shift Warning	RPM	100-19,900rpm	100 rpm	
Maximum Tachometer	MAX RPM	100-19,900rpm	100 rpm	
Speed Meter		2.3-300.0KM/h	0.1 KM/H	±1% or ± 0.1(KPH/)
Maximum Speed Meter	MAX	MAX 2.3-300.0KM/h	0.1 KM/H	±1% or ± 0.1(KPH/)
Average Speed Meter	AVG	AVG 2.3-300.0KM/h	0.1 KM/H	±1% or ± 0.1(KPH)
Trip Meter 1&2	TRIP 1&2	0.0-999.9 Km	0.1 Km	±0.1%
Odometer	ODO	0.0 - 999999 Km	1 Km	± 0.1%
Riding Time	RT	0:00'00"- 99:59'59"	1 Second	± 50PPM
Total Time	TT	9999H59'	1 Minute	± 50PPM
Clock		0:00'00"- 23:59'59"	1 Second /1 Minute	± 50PPM

Power Input: 12VDC.
Speed Sensor: No Contact Magnetic Sensor.
Tachometer Input: CDI or Ignition-coil signal.
Wheel Circumference setting: 1mm - 3999 mm (1 mm increment)
Operation Temperature: -10° C - +80° C (inner housing)
Storage Temperature: -25° C - +85° C (Inner housing)
Fuel Sensor Resistance: 100 Ω (For models with fuel meter only).

INSTALLATION & PARTS



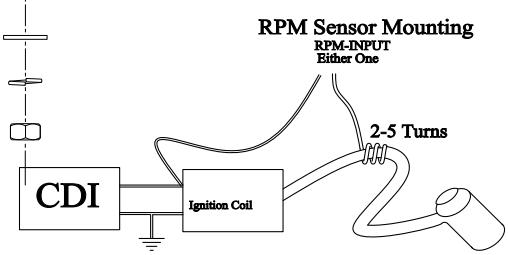


Speed Sensor & Magnet Mounting

Attention：

1. Align the center of the magnet to either of the sensor marking line or the end of the sensor.
2. Installing the sensor parallel to the vibration direction creates optimal anti-vibration effect.
3. Make sure the gap between the magnet and the sensor is within 8mm.

RPM Sensor Mounting



1. Signal intensity from ignition coli is dependent on vehicle type.
2. Circles 2-5 turns around ignition coil, with more turns creating steadily signal, fewer turns creating weaker signal.
3. The computer can use all type of ignition system, only if the RPM is not stable you must sometimes add the attached 1MOhm resistor in the wire of the RPM input.

FUNCTIONS

BAR RPM: Bar Graphic Tachometer
1. The bar graphic tachometer reading is always displayed at the bar graph.
2. Tachometer bar graphic displays up to 11,000 RPM.

RPM: Digital Tachometer
1. RPM is displayed in 2nd row.
2. Digital tachometer displays up to 19,900 RPM.
3. Tachometer signal picked up from either CDI or Ignition coil.

Shift Warning RPM
1. Function enables you to set up an RPM shift warning.
2. Bar-graphic tachometer flashes when RPM reaches pre-set value, and stops flashing after you shift gear.

MAX RPM: Maximum Tachometer
1. MAX RPM is displayed on 2nd row.
2. Displays highest tachometer reading achieved after last RESET operation.

SPD: Speed Meter
1. Speed meter display is on 1st row of the screen.
2. Displays speedometer reading up to 300.0 Km/H.

MAX: Maximum Speed Meter
1. MAX is displayed on 1st row.
2. Displays highest speed achieved after last RESET operation.

AVG: Average Speed Meter
1. AVG is displayed on 2nd row.
2. Calculates average speed from last RESET.

TRIP 1 & 2: Trip Meter 1& 2
1. TRIP function registers cumulative trip distance from last RESET while bike is being ridden.
2. Display is on 2nd row of screen.

ODO: Odometer
1. ODO registers cumulative distance traveled during motorbike operation.
2. ODO data is stored in memory, even when power is off.

RT: Riding Timer
1. Calculates total operation time from last RESET.
2. Count automatically begins with vehicle movement.

TT: Total Riding Timer
1. Calculates total operation time from the beginning of bike use.
2. Count automatically begins with vehicle movement.
3. TT data is stored in memory, even when power is off.

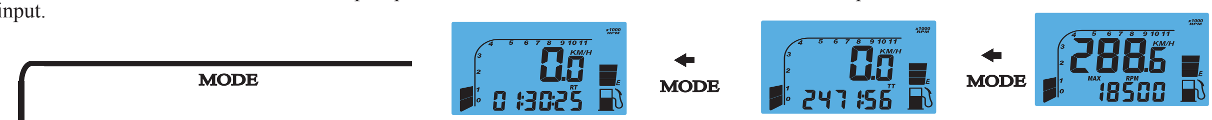
12/24 hour Clock
It displays 12- or 24-hour current time.

Fuel Meter (Only for models with the function)
1. Has 7 bargraphic indicator of fuel status.
2. Last bar flashes to indicate low fuel level.

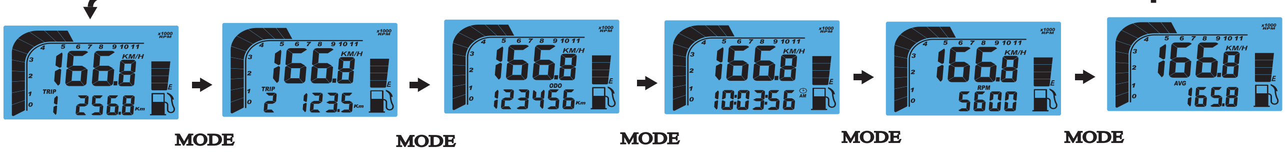
BUTTON OPERATIONS

MODE BUTTON

1. Press the MODE button to move all functions in loop sequence from one function screen to another when the speed sensor does not detect any signal input.

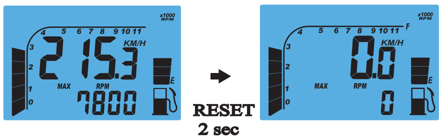


2. Press the MODE button to move partial functions in loop from one function screen to another when speed sensor detects signal input.



RESET BUTTON

1. Press MODE button to the desired screen then press RESET button for 2 seconds to reset TRIP 1, Trip 2, MAX, and MAX RPM data from stored values to zero individually.
2. The data of Trip 1, AVG & RT be reset at the same time when one of the 3 data functions is being reset.
3. ODO, clock and TT data cannot be reset.



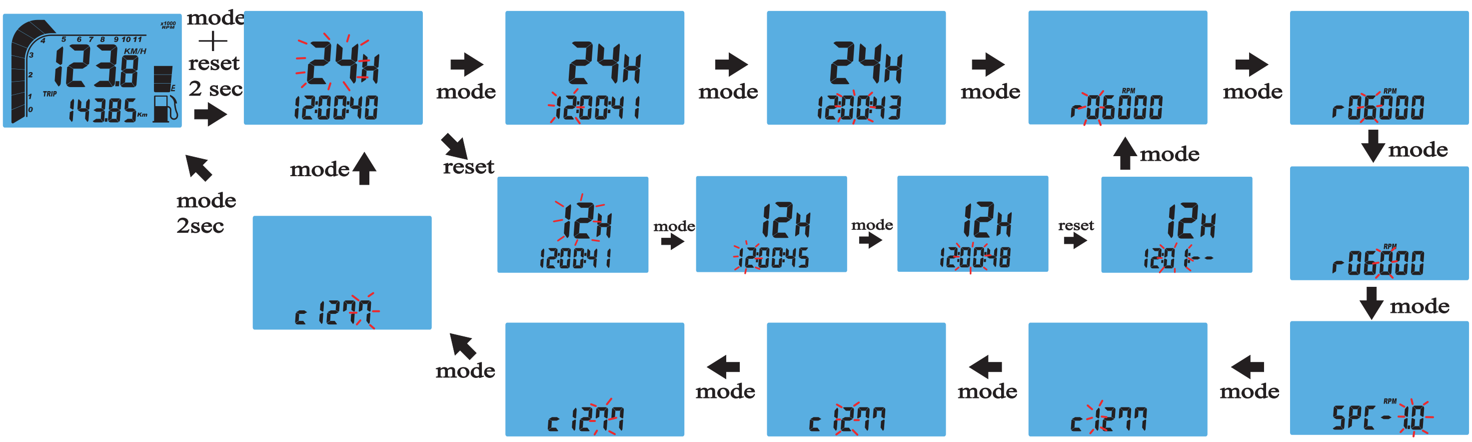
SHIFT RPM WARNING OPERATION

1. Press MODE button to the RPM screen; pull on the throttle until the desired shift RPM warning displayed.
2. Press RESET button to confirm and set up the shift warning RPM.
3. Bar-graphic tachometer will flash to warning you shift gear.
4. Operate items 1 & 2 to readjust the shift warning RPM.

WHEEL CIRCUMFERENCE TABLE

1. The details below have been calculated using the following formula; Tire Diameter (inch) x 25.4(mm/inch) x 3.1416 = wheel circumference (in mm).
2. Identify the tire size of your ATV/Motorcycle when you need to change different tire, and key in the corresponding number shown in the following chart.

Tire Size	Circumference	Tire Size	Circumference	Tire Size	Circumference
15 inch	1197mm	19 inch	1516mm	23 inch	1835mm
16 inch	1277mm	20 inch	1596mm	24 inch	1915mm
17 inch	1357mm	21 inch	1676mm	25 inch	1995mm
18 inch	1436mm	22 inch	1756mm	26 inch	2075mm

UNIT & WHEEL CIRCUMFERENCE SETTING

1. Setup operations include 12/24hour clock, shift warning RPM, numbers of engine rotation per signal and wheel circumference. These must be set up step by step. The computer will automatic reversion to main screen if no button operation for 75 seconds at any setting screen.
2. Press both MODE & RESET buttons to go into setting screen. In setting screens, press RESET button to add the flashing digit by 1 or convert units, press MODE button to confirm the digit setting and jump to next digit or next setting screen to be set. Press MODE button for 2 seconds at any setting screen to finish the setting and go to main screen.
3. It displays "12 or 24H and XX:XX-XX" symbols and AM/PM in case you select 12H.
4. Press RESET button converts 12/24H, press MODE button to complete the setting and jump to clock digit setting.
5. Press RESET button to increase flashing digit by one; press MODE button to confirm digit setting and jump to next digit.
6. Press MODE button to go to shift warning RPM setting screen after set clock.
7. It displays " RPM rXXX00 ". Press RESET button to increase flashing digit by one; press MODE button to confirm digit setting and jump to next digit.
8. Press MODE button to go to numbers of engine rotation per signal setting screen after completed shift warning RPM setting.
9. It displays "SPC-X.X RPM", the default value is 1.0; there are 4 options: 1.0, 2.0, 3.0 and 0.5. It means the numbers of engine rotation per signal. For example the value 2.0 means the engine rotate 2 turns to output a signal.
10. Press RESET button to move in loop sequence from one to another value of the 4 values. Press MODE button to confirm the setting and go to wheel circumference setting screen.
11. In "cXXXX" display, "c" means "Circumference", following 4 default digits; flashing digit is digit to be set.
12. Press RESET button to increase flashing digit by one; press MODE button toconfirm digit setting and jump to next digit.
13. Press MODE button to go into the unit setting screen after complete wheel circumference setting; press MODE button for 2 seconds to confirm wheel circumference setting and jump to main screen.